What is claimed is:

1. A sequence program editing apparatus comprising:

program storage means storing a sequence program;

duplication detecting means for detecting duplication of the same signal name assigned for different coils in the sequence program stored in said program storage device;

display means for displaying duplicated signal names detected by said duplication detecting means and locations of the duplicated signal names in the sequence program; and

signal-name rewriting means for rewriting the duplicated signal names displayed by the display means to eliminate the duplication of the same signal name assigned for the different coils.

2. A sequence program editing apparatus according to claim 1, further comprising selection means for allowing selection of signal names to be rewritten in the duplicated signal names displayed in said display means.

3. A sequence program editing apparatus according to claim 1, wherein said signal-name rewriting means includes means for rename contacts for the coils to which the same signal name is assigned, and renaming-range setting means for setting a range of renaming the contacts in the sequence program.

4. A sequence program editing apparatus according to claim 3, wherein said renaming-range setting means allows to set the renaming range for a divided unit of a main program and subprograms of the sequence program.

5. A sequence program editing apparatus according to claim 1, wherein said signal-name rewriting means comprises search-range setting means for

setting a search range of signal names assignable to the different coils, extracting means for extracting signal names assignable to the different coils within the set search range, and rewriting means for rewriting the duplicated signal names to the extracted signal names.

6.   A sequence program editing apparatus according to claim 1, further comprising communication means for communication with a programmable controller, wherein said duplication detecting means detects duplication of the same signal name assigned for different coils in a sequence program stored in the programmable controller.